

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

JC184  
Substitute for form 1449A/PTOINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

2

## Complete If Known

Application Number	10/656,848
Filing Date	09/06/2003
First Named Inventor	Ka-Ngo Leung
Art Unit	2817
Examiner Name	Not Yet Assigned

Attorney Docket Number IB-1826A

## U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
L		US- 2769096	10/30/1956	Frey	
L		US- 2983834	05/09/1961	Reiffel	
L		US- 3015132	12/26/1961	Hoyer	
L		US- 3113213	12/03/1963	Brinkerhoff	
L		US- 3258402	06/28/1966	Farnsworth	
L		US- 3417245A X6	12/17/1968	Schmidt	
L		US- 3609369	09/28/1971	Croitoru	
L		US- 3664960	05/23/1972	Wood	
L		US- 4076990A X6	02/28/1978	Hendry	
L		US- 4290847	09/22/1981	Johnson	
L		US- 4654561	03/31/1987	Shelton	
L		US- 4806829	02/21/1989	Nakao	
L		US- 4935194	06/19/1990	Verschoore	
L		US- 4977352A X6	12/11/1990	Williamson	
L		US- 5008800	04/16/1991	Klinkowstein	
L		US- 5053184	10/01/1991	Cluzeau	
L		US- 5135704	08/04/1992	Shefer	
L		US- 5215703	06/01/1993	Berdardet	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number ← Kind Code <sup>5</sup> (if known)				

Examiner Signature

*Leung*Date *07/03/03*  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Under the Paperwork Reduction Act  
Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary.)*

Sheet 2 of 2

PTO/SB/08a (03-03)

***Complete If Known***

Application Number	10/656,848
Filing Date	09/06/2003
First Named Inventor	Ka-Ngo Leung
Art Unit	2817
Examiner Name	Not Yet Assigned
Attorney Docket Number	IB-1826A

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

**Examiner  
Signature**

*W. B. Hargrave*

**Date  
Considered**

94/05

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.87 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



1/26/04

## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18  
Stylesheet Version v18.0

Title of Invention	Negative Ion Source with External RF Antenna						
Application Number:	10/656848 						
Confirmation Number:	8582						
First Named Applicant:	Ka-Ngo Leung						
Attorney Docket Number:	IB-1826A						
Examiner:	unknown unknown						
Search string:	( 4725449 or 5434353 or 5587226 or 6124834 or 4447732 or 4529571 or 4793961 or 5198677 or 6094012 or 3846636 or 4395631 or 6376978 or 20020150193 ).pn.						
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
1	1	4725449 ✓	1988-02-16	Ehlers et al.		427	49
1	2	5434353 ✓	1995-07-18	Kraus		174	15.6
1	3	5587226 ✓	1996-12-24	Leung et al.		428	210
1	4	6124834 ✓	2000-09-26	Leung et al.		343	867
1	5	4447732 ✓	1984-05-08	Leung et al.		250	427
1	6	4529571 ✓	1985-07-16	Bacon et al.		376	144
1	7	4793961 ✓	1988-12-27	Ehlers et al.		376	127
1	8	5198677 ✓	1993-03-30	Leung et al.		250	424
1	9	6094012 ✓	2000-07-25	Leung et al.		315	111.81
1	10	3846636 ✓	1974-11-05	Zehr et al.		250	499
1	11	4395631 ✓	1983-07-26	Salisbury		250	251
1	12	6376978	2002-04-23	Leung et al.		313	359.1

## US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

1/26/04

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
L	1	20020150193	2002-10-17	Leung et al.		376	108

Signature 

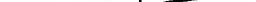
Examiner Name	Date
Rakesh Dhingra	8/04/05

9/20/04.

PTO/SB/058 (08-03)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449B/PTO		<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<i>Application Number</i>	10/658,848
(Use as many sheets as necessary)		<i>Filing Date</i>	09/06/2003
		<i>First Named Inventor</i>	Ka-Ngo Leung
		<i>Art Unit</i>	2827
		<i>Examiner Name</i>	Unassigned
<i>Sheet</i>	1	<i>of</i>	1
		<i>Attorney Docket Number</i>	IB-1826A

Examiner Signature		Date Considered	08/09/05
-----------------------	---	--------------------	----------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**1** Applicant's unique citation designation number (optional). **2** Applicant is to place a checkmark in the box if the application is being filed under seal.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to be provided by the U.S. Patent and Trademark Office.

**USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments and suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.